

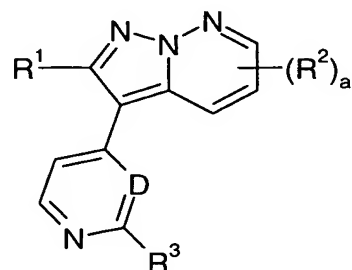
Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

What is claimed is:

Claim 1 (Original): A compound of Formula (I):



(I)

or a salt, solvate, or physiologically functional derivative thereof, wherein

D is N or CH;

R¹ is aryl or heteroaryl, where said aryl or said heteroaryl may be optionally substituted one or more times with C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, oxo, hydroxy, mercapto, carboxy, tetrazolyl, carbamoyl optionally substituted with alkyl, aminosulfonyl optionally substituted by alkyl, acyl, aroyl, heteroaroyl, acyloxy, aroyloxy, heteroaroyloxy, alkoxycarbonyl, halogen, C₁-C₆ haloalkyl, heterocyclyl, heteroaryl, aryl, cyano, azido, nitro, or -NR⁴R⁵;

a is 1 or 2;

y is 0, 1, or 2;

R² is hydrogen, C₁-C₆ alkyl, C₁-C₆ alkenyl, C₁-C₆ alkynyl, C₁-C₆ haloalkyl, C₃-C₇ cycloalkyl, halogen, heterocyclyl, aryl, heteroaryl, cyano, azido, nitro, -OR⁸, -

OR^6R^8 , $-R^6R^7$, $-R^6R''$, $S(O)_yR^7$, $-C(O)R^7$, $-C(O)OR^7$, $-C(O)NR^4R^5$, $-NR'(C=NR^4)NR^4R^5$, $-OC(O)NR^4R^5$, $-OC(O)OR^7$, $-C(=NR^4)NR^4R^5$, $-NR^4R^5$, $-OC(O)R^7$, or $-NR^7C(O)R^7$;

R^3 is $-(Q)_p-(Q^1)$

where

Q is O, $N(R^8)$ or $S(O)_y$,

p is 0 or 1,

y is 0, 1, or 2, and

Q^1 is C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl, C_1 - C_6 haloalkyl, aryl, aryl substituted with $-C(O)N(H)R^6NR^4R^5$ or $-OC(H)(OH)R^6NR^4R^5$, heteroaryl, aralkyl, or $-R^6NR^4R^5$;

R^4 and R^5 are independently hydrogen, C_1 - C_3 alkyl, C_3 - C_7 cycloalkyl, or R^4 and R^5 together with the nitrogen atom to which they are bound form a heterocyclyl;

R^6 is alkylene, arylene, heteroarylene, cycloalkylene, alkenylene, cycloalkenylene, or alkynylene;

R^7 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkenyl, C_1 - C_6 alkynyl, $-NR^4R^5$, aryl, aralkyl, heteroaryl, cycloalkyl, heterocyclyl, $-S(O)_yR^8$, $-C(O)R^8$, $-C(O)OR^8$, $-C(O)NR^4R^5$, $-S(O)_2NR^4R^5$, $-NR'(C=NR^4)NR^4R^5$, $-OC(O)NR^4R^5$, $-OC(O)OR^8$, $-C(=NR^4)NR^4R^5$, $-NR^4R^5$, or $-NR^7C(O)R^7$

R^8 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkenyl, C_1 - C_6 alkynyl, $-NR^4R^5$, aryl, aralkyl, heteroaryl, cycloalkyl, heterocyclyl, or $-S(O)_2R^9$;

R^9 is C_1 - C_6 alkyl or C_1 - C_6 haloalkyl;

R' is C_1 - C_3 alkylene; and

R'' is $-OR^7$, $-OC(O)NR^4R^5$, $-OC(O)OR^7$, $-OC(O)R^7$.

Claim 2 (Original): The compound of claim 1 wherein R¹ is optionally substituted aryl.

Claim 3 (Original): The compound of claim 2 wherein R¹ is optionally substituted phenyl.

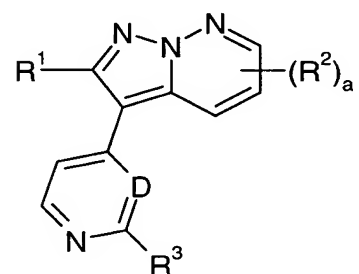
Claim 4 (Original): The compound of claim 3 wherein R¹ is phenyl is substituted in the para position.

Claim 5 (Original): The compound of claim 1 wherein R³ is further defined wherein Q is N(R⁸), where R⁸ is H, p is 1, and Q¹ is optionally substituted aryl.

Claim 6 (Original): The compound of claim 5 wherein Q¹ is optionally substituted phenyl.

Claim 7 (Original): The compound of claim 6 wherein the phenyl is substituted in the meta or para position.

Claim 8 (Original): A method for the treatment or prophylaxis of a disorder in a mammal, said disorder being characterized by misregulation of GSK-3, comprising administering a compound of Formula (I):



(I)

or a salt, solvate, or physiologically functional derivative thereof, wherein

D is N or CH;

R^1 is hydrogen, C_1 - C_6 alkyl, C_1 - C_4 alkenyl, C_1 - C_4 alkynyl, C_1 - C_3 alkoxy, halogen, hydroxy, cyano, $-S(O)_yC_1$ - C_3 alkyl, $-NR^4R^5$, aryl, or heteroaryl, where said aryl or said heteroaryl may be optionally substituted one or more times with C_1 - C_6 alkyl, C_1 - C_6 alkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, oxo, hydroxy, mercapto, carboxy, tetrazolyl, carbamoyl optionally substituted with alkyl, aminosulfonyl optionally substituted by alkyl, acyl, aroyl, heteroaroyl, acyloxy, aroyloxy, heteroaroyloxy, alkoxycarbonyl, halogen, C_1 - C_6 haloalkyl, heterocyclyl, heteroaryl, aryl, cyano, azido, nitro, or $-NR^4R^5$;

a is 1 or 2;

y is 0, 1, or 2;

R^2 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkenyl, C_1 - C_6 alkynyl, C_1 - C_6 haloalkyl, C_3 - C_7 cycloalkyl, halogen, heterocyclyl, aryl, heteroaryl, cyano, azido, nitro, $-OR^8$, $-OR^6R^8$, $-R^6R^7$, $-R^6R''$, $S(O)_yR^7$, $-C(O)R^7$, $-C(O)OR^7$, $-C(O)NR^4R^5$, $-NR^7(C=NR^4)NR^4R^5$, $-OC(O)NR^4R^5$, $-OC(O)OR^7$, $-C(=NR^4)NR^4R^5$, $-NR^4R^5$, $-OC(O)R^7$, $-NR^7C(O)R^7$;

R^3 is $-(Q)_p-(Q^1)$

where

Q is O, $N(R^8)$ or $S(O)_y$, p is 0 or 1, y is 0, 1, or 2 and

Q^1 is C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl, C_1 - C_6 haloalkyl, aryl, aryl substituted with $-C(O)N(H)R^6NR^4R^5$ or $-OC(H)(OH)R^6NR^4R^5$, heteroaryl, aralkyl, or $-R^6NR^4R^5$;

R^4 and R^5 are independently hydrogen, C_1 - C_3 alkyl, C_3 - C_7 cycloalkyl, or R^4 and R^5 , together with the nitrogen atom to which they are bound, form a heterocyclyl;

R^6 is alkylene, arylene, heteroarylene, cycloalkylene, alkenylene, cycloalkenylene, and alkynylene;

R^7 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkenyl, C_1 - C_6 alkynyl, $-NR^4R^5$, aryl, aralkyl, heteroaryl, cycloalkyl, heterocyclyl, $-S(O)_yR^8$, $-C(O)R^8$, $-C(O)OR^8$, $-C(O)NR^4R^5$, $-S(O)_2NR^4R^5$, $-NR^4(C=NR^4)NR^4R^5$, $-OC(O)NR^4R^5$, $-OC(O)OR^8$, $-C(=NR^4)NR^4R^5$, $-NR^4R^5$, $-NR^7C(O)R^7$

R^8 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkenyl, C_1 - C_6 alkynyl, $-NR^4R^5$, aryl, aralkyl, heteroaryl, cycloalkyl, heterocyclyl, or $-S(O)_2R^9$;

R^9 is C_1 - C_6 alkyl or C_1 - C_6 haloalkyl;

R' is C_1 - C_3 alkylene; and

R'' is $-OR^7$, $-OC(O)NR^4R^5$, $-OC(O)OR^7$, $-OC(O)R^7$.

Claim 9 (Currently Amended): The method compound of claim 8 wherein R^1 is optionally substituted aryl.

Claim 10 (Currently Amended): The method compound of claim 9 wherein R^1 is optionally substituted phenyl.

Claim 11 (Currently Amended): The method compound of claim 10 wherein R^1 is phenyl is substituted in the para position.

Claim 12 (Currently Amended): The method compound of claim 8 wherein R^3 is further defined wherein Q is $N(R^8)$, where R^8 is H, p is 1, and Q^1 is optionally substituted aryl.

Claim 13 (Currently Amended): The method compound of claim 12 wherein Q^1 is optionally substituted phenyl.

Claim 14 (Currently Amended): The method compound of claim 13 wherein the phenyl is substituted in the meta or para position.

Claim 15 (Original): A method as claimed in claim 14, wherein the compound is selected from the group consisting of:

N-Cyclopropyl-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-Cyclopropyl-N-methyl-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 4-Pyrazolo[1,5-b]pyridazin-3-yl-N-(2,2,2-trifluoroethyl)-2-pyrimidinamine;
 N-Phenyl-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-Chlorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-Fluorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 3-[(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amino]benzonitrile;
 4-[(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amino]benzoic acid;
 4-Pyrazolo[1,5-b]pyridazin-3-yl-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;
 N-(3-Nitrophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(2-Chlorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-Methoxyphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 4-Pyrazolo[1,5-b]pyridazin-3-yl-N-(3,4,5-trimethoxyphenyl)-2-pyrimidinamine;
 N-[3-(1,3-Oxazol-5-yl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)-1H-benzimidazol-6-amine;
 N-(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)-1,3-benzoxazol-2-amine;
 N-(6-Chloro-1H-benzimidazol-2-yl)-N-(4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amine;
 N-(4-Chlorobenzyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N¹,N¹-Dimethyl-N³-(4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)-1,3-propanediamine;
 N-[3-(4-Morpholinyl)propyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[3-(4-Methyl-1-piperazinyl)propyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 1-{3-[(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amino]propyl}-2-pyrrolidinone;

N-[3-Chloro-4-(4-methyl-1-piperazinyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[4-(4-Methyl-1-piperazinyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[3-Methyl-4-(4-methyl-1-piperazinyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[4-(4-Methyl-1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[3-Chloro-4-(4-morpholinyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-{4-[(Diethylamino)methyl]phenyl}-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[2-(Diethylamino)ethyl]-4-[(4-pyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinyl]amino]benzamide;
 N-Cyclopropyl-4-(2-methylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-Cyclopropyl-4-(2-ethylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-(2-Butylpyrazolo[1,5-b]pyridazin-3-yl)-N-cyclopropyl-2-pyrimidinamine;
 N-[4-(4-Methyl-1-piperazinyl)phenyl]-4-(2-methylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-(2-Ethylpyrazolo[1,5-b]pyridazin-3-yl)-N-[4-(4-methyl-1-piperazinyl)phenyl]-2-pyrimidinamine;
 4-(2-Butylpyrazolo[1,5-b]pyridazin-3-yl)-N-[4-(4-methyl-1-piperazinyl)phenyl]-2-pyrimidinamine;
 N-Cyclopropyl-4-(6-methoxypyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-(6-Methoxypyrazolo[1,5-b]pyridazin-3-yl)-N-[4-(4-methyl-1-piperazinyl)phenyl]-2-pyrimidinamine;
 3-[2-(Cyclopropylamino)-4-pyrimidinyl]pyrazolo[1,5-b]pyridazin-6-ol;
 N-Cyclopropyl-4-(6-isopropoxypyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-[4-(6-Isopropoxypyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinyl]-N-[4-(4-methyl-1-piperazinyl)phenyl]amine;
 3-[2-(Cyclopropylamino)-4-pyrimidinyl]pyrazolo[1,5-b]pyridazin-6-yl trifluoromethanesulfonate;

4-[6-(2-Chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-cyclopropyl-2-pyrimidinamine;
 N-Cyclopropyl-4-[6-(2-thienyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-Cyclopropyl-4-[6-(4-fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-Cyclopropyl-4-(6-vinylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-Cyclopropyl-4-[6-(4-morpholinyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-Cyclopentyl-3-[2-(cyclopropylamino)-4-pyrimidinyl]pyrazolo[1,5-b]pyridazin-6-amine;
 N-Cyclopropyl-4-[6-(1-pyrrolidinyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-Cyclopropyl-4-[6-(2-fluoro-4-pyridinyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-Cyclopropyl-4-[6-(phenylsulfanyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 4-[6-(4-Fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-(4-methoxyphenyl)-2-pyrimidinamine;
 4-[6-(4-Fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]-2-pyrimidinamine;
 N¹,N¹-Dimethyl-N⁴-(4-[6-(4-morpholinyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinyl)-1,4-benzenediamine;
 1-(Dimethylamino)-3-[4-({4-[6-(4-morpholinyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinyl}amino)phenoxy]-2-propanol;
 N-(1,3-benzodioxol-5-yl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(2,3-Dihydro-1,4-benzodioxin-6-yl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[3-Methoxy-5-(trifluoromethyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 4-[(4-Pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amino]benzonitrile;
 N-(4-Nitrophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3-Methoxyphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,5-Dimethylphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;

4-[2-(4-methoxyphenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-phenylpyrimidin-2-amine;

4-[2-(4-methoxyphenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-[3-(trifluoromethyl)phenyl]pyrimidin-2-amine;

N-(3,4-difluorophenyl)-4-[2-(4-methoxyphenyl)pyrazolo[1,5-b]pyridazin-3-yl]pyrimidin-2-amine;

N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-[2-(4-methoxyphenyl)pyrazolo[1,5-b]pyridazin-3-yl]pyrimidin-2-amine;

N-[4-chloro-3-(trifluoromethyl)phenyl]-4-[2-(4-methoxyphenyl)pyrazolo[1,5-b]pyridazin-3-yl]pyrimidin-2-amine;

N-phenyl-4-{2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}pyrimidin-2-amine;

N-[3-(trifluoromethyl)phenyl]-4-{2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}pyrimidin-2-amine;

N-(3,4-difluorophenyl)-4-{2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}pyrimidin-2-amine;

N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-{2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}pyrimidin-2-amine;

N-[4-chloro-3-(trifluoromethyl)phenyl]-4-{2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}pyrimidin-2-amine;

4-[2-(4-chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-phenylpyrimidin-2-amine;

4-[2-(4-chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-[3-(trifluoromethyl)phenyl]pyrimidin-2-amine;

4-[2-(4-chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-(3,4-difluorophenyl)pyrimidin-2-amine;

4-[2-(4-chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-(2,3-dihydro-1,4-benzodioxin-6-yl)pyrimidin-2-amine;

4-[2-(4-chlorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-[4-chloro-3-(trifluoromethyl)phenyl]pyrimidin-2-amine;

4-{6-methyl-2-[4-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-N-phenylpyrimidin-2-amine;

N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-[6-methyl-2-(4-methylphenyl)pyrazolo[1,5-b]pyridazin-3-yl]pyrimidin-2-amine;

N-[3,5-bis(trifluoromethyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,5-dimethoxyphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-sec-butylphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(4-tert-butylphenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,5-dichlorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,4-dichlorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,5-difluorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[3-bromo-5-(trifluoromethyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 3-[(4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinyl)amino]-5-(trifluoromethyl)benzamide;
 N-(3,4-difluorophenyl)-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-[4-chloro-3-(trifluoromethyl)phenyl]-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine;
 N-phenyl-4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;
 N-[4-chloro-3-(trifluoromethyl)phenyl]-4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-(3,5-difluorophenyl)-4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-(3,4-difluorophenyl)-4-(2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-[2-(4-fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-phenyl-2-pyrimidinamine;
 N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-[2-(4-fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 4-[2-(4-fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;

N-[4-chloro-3-(trifluoromethyl)phenyl]-4-[2-(4-fluorophenyl) pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-(3,4-difluorophenyl)-4-[2-(4-fluorophenyl)pyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
 N-phenyl-4-{2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-{2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-[3-(trifluoromethyl)phenyl]-4-{2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-[4-chloro-3-(trifluoromethyl)phenyl]-4-{2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-(3,4-difluorophenyl)-4-{2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 4-(6-methyl-2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-N-phenyl-2-pyrimidinamine;
 N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-(6-methyl-2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-(6-methyl-2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;
 N-[4-chloro-3-(trifluoromethyl)phenyl]-4-(6-methyl-2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 N-(3,4-difluorophenyl)-4-(6-methyl-2-phenylpyrazolo[1,5-b]pyridazin-3-yl)-2-pyrimidinamine;
 4-{6-methyl-2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-N-phenyl-2-pyrimidinamine;
 4-{6-methyl-2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;
 N-[4-chloro-3-(trifluoromethyl)phenyl]-4-{6-methyl-2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-(3,4-difluorophenyl)-4-{6-methyl-2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;
 N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-{6-methyl-2-[3-(trifluoromethyl)phenyl]pyrazolo[1,5-b]pyridazin-3-yl}-2-pyrimidinamine;

4-[2-(4-fluorophenyl)-6-methylpyrazolo[1,5-b]pyridazin-3-yl]-N-phenyl-2-pyrimidinamine;
N-(2,3-dihydro-1,4-benzodioxin-6-yl)-4-[2-(4-fluorophenyl)-6-methylpyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
4-[2-(4-fluorophenyl)-6-methylpyrazolo[1,5-b]pyridazin-3-yl]-N-[3-(trifluoromethyl)phenyl]-2-pyrimidinamine;
N-[4-chloro-3-(trifluoromethyl)phenyl]-4-[2-(4-fluorophenyl)-6-methylpyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
N-(3,4-difluorophenyl)-4-[2-(4-fluorophenyl)-6-methylpyrazolo[1,5-b]pyridazin-3-yl]-2-pyrimidinamine;
4-(2-cyclopropylpyrazolo[1,5-b]pyridazin-3-yl)-N-phenylpyrimidin-2-amine;
4-(2-cyclopropylpyrazolo[1,5-b]pyridazin-3-yl)-N-(3,4-difluorophenyl)pyrimidin-2-amine;
4-(2-cyclohexylpyrazolo[1,5-b]pyridazin-3-yl)-N-phenylpyrimidin-2-amine;
4-(2-cyclohexylpyrazolo[1,5-b]pyridazin-3-yl)-N-(3,4-difluorophenyl)pyrimidin-2-amine; or
a salt, solvate, or physiologically functional derivative thereof.

Claim 16 (Currently Amended): A pharmaceutical composition, comprising:
a therapeutically effective amount of a compound as claimed in claim ~~any one of claims 1 to 7~~, or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

Claim 17 (Original): The pharmaceutical composition of claim 16, further comprising:

at least one additional agent for the treatment or prophylaxis of diabetes.

Claim 18 (Currently Amended): A pharmaceutical composition, comprising:
a therapeutically effective amount of a compound as in claim ~~claims 1 to 15~~, or a salt, solvate, or a physiologically functional derivative thereof, and one or

more of pharmaceutically acceptable carriers, diluents and excipients for preventing or treating conditions mediated by GSK-3.

Claim 19 (Currently Amended): A method of treating a disorder in a mammal, said disorder being mediated by inappropriate GSK-3 activity, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in ~~any one of claim~~ claims 1 to 15, or a salt, solvate, or a physiologically functional derivative thereof.

Claim 20 (Original): The method of claim 19, wherein the disorder is Type II Diabetes.

Claims 21-23 (Cancelled):

Claim 24 (Currently Amended): A method of treating diabetes in a mammal, including administering to said mammal a therapeutically effective amount of a compound as claimed in claim ~~any of claims 1 to 7~~, or salt, solvate or physiologically functional derivative thereof.

Claim 25 (Currently Amended): A method of treating diabetes in a mammal, including administering to said mammal therapeutically effective amounts of (i) a compound as claimed in claim ~~any of claims 1 to 15~~, or salt, solvate or physiologically functional derivative thereof and (ii) at least one additional anti-diabetic therapy.